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10/630,573	07/30/2003	James Cucuzza	34703/0040	3989

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EXAMINER

JOHANNSEN, DIANA B

ART UNIT

PAPER NUMBER

1634

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/630,573

Applicant(s)

CUCUZZA ET AL.

Examiner

Diana B. Johannsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicants' election of Group I in the response filed April 27, 2006 is noted. However, upon further consideration, as a search of Groups I and II together was not found to be unduly burdensome, the restriction requirement mailed March 27, 2006 is hereby withdrawn. Groups I and II have been rejoined, and claims 1-4 fully examined for patentability under 37 CFR 1.104.

In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claims including all the limitations of an allowable product claim or rejoined process claim are presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

### ***Priority***

2. Because the inventions of claims 1-4 were disclosed in provisional application 60/400,305, the effective filing date of the instant application is that of the provisional application, i.e., August 1, 2002.

### ***Information Disclosure Statement***

3. The information disclosure statement filed 22 October 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document;

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each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Particularly, the O'Brien et al reference contained in the IDS appears to have been cut off at the bottom and right edge of the page, and is thus not fully legible. Accordingly, this reference has not been considered.

### ***Claim Objections***

4. Claim 2 is objected to because of the following informalities: the claim contains a period within the middle of a sentence (see the second line of the claim, following the recitation of "*citrulli*"). Appropriate correction is required.

### ***Specification***

5. The use of the trademarks EPPENDORF, MICROSPIN, GENEAMP, SEAKEM, TRIZMA, MIRACLOTH, NUSIEVE, and SEPHADEX has been noted in this application. The trademarks should be capitalized wherever they appear.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-3 are indefinite over the recitation of the language “primers comprising....(SEQ ID NO:1) and ....(SEQ ID NO: 2)” in claim 2 (step (b)) and claim 3 (steps (c) and (h)). This language is unclear because it appears to refer to multiple primers, each of which comprises SEQ ID Nos 1 and 2 (as opposed to, e.g., a set of primers including one primer comprising SEQ ID NO: 1 and one primer comprising SEQ ID NO: 2, as discussed in the specification). Clarification is therefore required.

Claim 2 is indefinite over the recitation of the limitation “the amplification product(s)” in step (c) because there is insufficient antecedent basis for this limitation in the claim.

The following limitations in claim 3 lack sufficient antecedent basis: “the target DNA” (in step (d)); “the treated seed lot” in step (f)); “the second test sample suspected of containing....” in step (g); “the amplification product(s) of the target DNA” in step (i); and “the treatment” in step (j).

Claim 3 is indefinite over the recitation of the phrase “comparing the amount of amplification product(s) or absence of amplification products in the second test sample to the amount of amplification products detected in the first test sample in step (d) as an indication of whether or not the treatment has been successful in reducing or eradicating *Acidovorax avenae* subsp. *citrulli* in the seed lot” in step (j) of the claim. First, it is noted that the claim is drawn to a method “of evaluating or monitoring the efficacy of treatments utilized to eliminate *Acidovorax avenae* subsp. *citrulli* from a seed lot.” Given the differences between the claim preamble and the final claim step, it not clear whether the claim is drawn to a method of evaluating a single treatment or multiple

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treatments. Further, the language “comparing the amount of amplification product(s) or absence of amplification products in the second test sample to the amount of amplification products detected in the first test sample in step (d)” is confusing, and does not apprise one of skill in the art as to how one would conclude whether a treatment or treatments had been successful (for example, the claim does not clearly indicate whether the absence of amplification products would be considered indicative of success, or indicate whether more or less amplification products in the second test sample as compared to the first would be indicative of success). Accordingly, the language of step (j) should be clarified so as to apprise one of skill in the art as to how one determines that a treatment (or treatments) has (have) been successful, and further so as to make clear whether the claim requires the evaluation of more than one treatment.

Claim 4 is indefinite over the recitation of the language “a primer set comprising oligonucleotides having the sequence comprising of...(SEQ ID NO: 1) and .... (SEQ ID NO: 2).” First, this language is unclear because it appears to refer to multiple oligonucleotides, each of which comprises SEQ ID Nos 1 and 2 (as opposed to, e.g., a set of primers including one oligonucleotide comprising SEQ ID NO: 1 and one oligonucleotide comprising SEQ ID NO: 2, as discussed in the specification). Further, while language such as “having the sequence of SEQ ID NO: 1” clearly refers to the full length sequence set forth in SEQ ID NO: 1, the language of the instant claim “having the sequence comprising of....” is confusing; no such sequence is previously set forth in

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the claim, and it is not clear what particularly sequence would be considered "the sequence comprising of" SEQ ID NO: 1 and SEQ ID NO: 2.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schaad et al (U.S. Patent 6,146,834 [11/14/2000]).

It is noted that claim 1 is drawn to a "primer set comprising sequences of" SEQ ID NO: 1 and SEQ ID NO: 2. Accordingly, the claim as written is sufficiently broad so as to encompass a primer set comprising any sequences contained within SEQ ID Nos 1 and 2 (for example, any primer set in which one primer includes any dinucleotide found in instant SEQ ID NO: 1 and another primer comprises any dinucleotide found in SEQ ID NO: 2, etc.).

Schaad et al disclose multiple sets of primers that specifically amplify *A. avenae* subspecies *citrulli* (see entire reference, particularly column 5, lines 25-40; column 6, lines 28-67; Examples 5-7; claims 6 and 10). Because the primer sets of Schaad et al contain sequences present in instant SEQ ID Nos 1 and 2, the primer sets of Schaad et al are sufficient to meet the requirements of the instant claim. Schaad et al therefore anticipate instant claim 1.

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**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diana B. Johannsen whose telephone number is 571/272-0744. The examiner can normally be reached on Monday and Thursday, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached at 571/272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Diana B. Johannsen  
Primary Examiner  
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